



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/807,900

03/24/2004

Kim Annon Ryal

020699-100700US

5359

37490 7590 08/09/2007  
Trellis Intellectual Property Law Group, PC  
1900 EMBARCADERO ROAD  
SUITE 109  
PALO ALTO, CA 94303

EXAMINER

NATNAEL, PAULOS M

ART UNIT

PAPER NUMBER

2622

MAIL DATE

DELIVERY MODE

08/09/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/807,900

Applicant(s)

RYAL, KIM ANNON

Examiner

Paulos M. Natnael

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 5/11/07 have been fully considered but they are not persuasive.

In the Office Action, it was asserted that Arora, U.S. Patent Application Publication No. 2004/0114049 (hereinafter "Arora") discloses displaying multiple output streams because "multimedia device 140 can generate video windows of arbitrary sizes for displaying output video stream 145 based on a selected aspect ratio" (Arora, parag. [0013]). In addition, it is asserted that it "makes no sense" to display the same video stream on different windows. (Office Action, page 3). However, applicants assert that this further clarifies why Arora only displays one video stream on one window at any one time. Thus, the statement in Arora as to generating video windows of arbitrary sizes refers not to a plurality of windows for display at a same time with different video streams in each, but rather to a plurality of supported window sizes.

In the Office Action, "windows" being a plural is noted (Office Action, page 3). However, what is not noted, but what should be noted is that "output video stream 145" in the same sentence is singular (Arora, paragraph. [0013]). Arora simply does not disclose displaying multiple video streams simultaneously. Note a single output video stream 145 in FIG. 1 of Arora. While the Office Action notes that the input video stream of Arora is modified, there is nothing in Arora to indicate that the input video stream is displayed along with the modified video stream. Also see in FIG. 1 of Arora, 155 "modified video content" with nothing about the input video stream 105 being displayed as well. In fact, input video stream 105 is provided to video encoder 120, but there is no direct connection of input video stream 105 to multimedia device 140 for outputting along with output video stream 145. As shown in Arora, output video stream 145 containing modified video content 155 is output by multimedia device 140.

Art Unit: 2622

The examiner disagrees. As the applicant admits, Aurora discloses windows (plural). It is also noted that all claims limitation as claimed, excepting claim 25, use the singular "stream" not the plural "streams". Nevertheless, one skilled in the art would recognize also that a stream of video or a video stream may comprise one or more video images or frames of video. Thus, the notion that a video stream is singular.

(1) Arora discloses, "the multimedia device 140 can generate video windows of arbitrary sizes for displaying output video stream 145 based on a selected aspect ratio."

(Paragraph [0013]) Since Arora discloses generating a second video stream based on a first video stream (see claim 1, page 6), and the device 140 can generated video windows of arbitrary sizes, the different size video windows displaying the video stream constitute modified versions of the video stream. In other words, Arora does not preclude displaying multiple versions of the video stream 145 (windows of arbitrary sizes), because, contrary to applicant's argument, the skilled in the art would readily recognize displaying the same video stream (145) on multiple windows of different sizes (or the same sizes) makes no sense. It is clear from the teaching of Arora a second video stream, for example, is generated from the first video stream and the video streams would be displayed in multiple windows in different sizes as desired.

(2) As was shown in the previous office action, the application discloses that modifying comprises duplicating and removing or adding at least one video element from or to the video stream to produce a modified duplicated video stream (see page 3).

Likewise, Arora discloses providing modified video stream by eliminating the extraneous video used to convert video having second aspect ratio [paragraph 0010]. The multimedia device 140 can generate video windows of arbitrary sizes for displaying output video stream 145 based on a selected aspect ratio [0013]. **The multimedia device can then present a second video stream to the user. The second video stream is presented at the detected aspect ratio. In one embodiment, the second video stream represents the video content in the first video stream with a significant amount of extraneous video, such as the black bars, removed.** [See 0023]. [Emphasis added]

Thus, the examiner submits, Arora clearly states not only an output video stream, but that the system can present a second video stream as well. To emphasize this, Arora discloses, **"receiving a first video stream, wherein the first video stream is provided at a first aspect ratio, providing a second video stream, based on the first video stream, wherein the second video stream is provided at the second aspect ratio. (see claim 1, page 6)** The key here is the phrase "based on the first video stream." If it is based on the first video stream, it must have been duplicated, or is a duplicate, a copy, of the video stream, except it's modified by removing some elements of the video such as the black bars! Therefore, the argument that Arora does not use the same words such as duplicate, copy simultaneous, picture, PIP as that of the instant application and, thus, does not disclose or suggest the claimed subject matter, is unpersuasive because one does have to use the same words and terms the applicant is using.

Finally, as the skilled in the television art would readily recognize, if a display has "windows" the images MUST be displayed in picture-in-picture (PIP) or picture within a picture, or picture-out-picture. Otherwise, the image would be on top of each other and would not be much use to the viewer. Thus, in this regard, the reference of Arora inherently discloses the notoriously well known PIP.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims **1,2,4, 8-33** are again rejected under 35 U.S.C. 102(e) as being anticipated by Arora, U.S. Patent Application Publication No. 2004/0114049.

Considering claims 1, 14-17,25, 30, (as amended) Arora discloses a system for detecting aspect ratio. The method includes receiving an input video stream. The input video stream is provided at a first aspect ratio. In one embodiment, the input video stream is provided as part of an analog video stream and the first aspect ratio is a standard or full screen, television aspect ratio, such as a 4:3 aspect ratio. The method also includes determining a second aspect ratio, different from the first aspect ratio. In

Art Unit: 2622

one embodiment, the input video stream is analyzed to identify portions of the input video stream that are moving. The portions of the input video stream that are moving are used to identify a video content aspect ratio which may be present in the first input video stream, wherein video outside of the video content aspect ratio is related to extraneous video, such as black bars, used to make up the rest of the video frame to attain the first aspect ratio. The video content aspect ratio can then be used to identify the second aspect ratio. The method further includes providing a modified video stream, based on the input video stream. The modified video stream is provided at the second aspect ratio. The present disclosure has the advantage of eliminating the extraneous video used to convert video having the second aspect ratio to video having the first aspect ratio. Another advantage of at least one embodiment of the present disclosure is that users can reduce an amount of desktop space used to provide video playback by eliminating black bars provided with the video. (Paragraph [0011]) The method comprises receiving a first video stream, providing a second video stream, based on the first video stream. (page 6) FIG. 1 illustrates a system for generating a modified video stream from a received video stream is shown and referenced generally as system 100, according to one embodiment of the present disclosure. (See paragraph [0011])

Arora further discloses, "...A portion of multimedia data 125 can be identified for storage or display. Furthermore, multimedia device 140 can generate video windows of arbitrary sizes for displaying output video stream 145 based on a selected aspect ratio...Aspect ratio detector 130 identifies the portion of multimedia data 125 to process,

store, or display. The full-screen aspect ratio allows the first video stream to be displayed on a standard television screen...the system includes an information handling system capable of presenting a representation of the first video stream in a window having an arbitrary size. The system is capable of displaying video using a variety of aspect ratios. (See paragraph [0021]). The multimedia device can then present a second video stream to the user. The second video stream is presented at the detected aspect ratio. In one embodiment, the second video stream represents the video content in the first video stream with a significant amount of extraneous video, (i.e. modified) such as the black bars, removed. See [0023]. If the video stream to be displayed is to be displayed full-screen and the detected aspect ratio is not the same as the aspect ratio of the display device, the aspect ratio used to display the video stream may need to be modified. Accordingly, the aspect ratio of the display device may be applied to the detected aspect ratio for full-screen display, while still reducing extraneous video present in the first video stream. Once step 240 is completed, step 210 can be performed again. While the received video stream is still provided at the first, or standard, aspect ratio, the video content aspect ratio can change, such as due to a commercial or change in programming. Accordingly, the received video stream can be re-analyzed to detect new aspect ratios. [0025] [all emphasis added] Thus, Arora discloses all claimed subject matter.

Considering claim 2, Arora discloses that determining a second aspect ratio includes identifying program content associated with the first video stream; identifying a video



Art Unit: 2622

content aspect ratio based on the program content, and applying the video content aspect ratio to the second aspect ratio. (See page 6, claims 1 and 8)

Considering claim 4, see rejection of claim 1;

As to claims 8 and 9, see discussion for Fig.4 and elsewhere throughout the disclosure.

Considering claims 10-13, 18-19 Arora modifies the input video stream by eliminating black bars, for example, (see page 1, paragraph 0010 and 0011) and extraneous video content can be added. See paragraph [0014].

Regarding claim 20, Arora discloses the multimedia device includes an MPEG device. MPEG is well known in the art and that a transport stream (TS) or MPEG-TS is a format specified in MPEG. Thus, Aurora inherently discloses TS.

As to claims 21-22, see rejection of claim 20.

Regarding claims 23-24, Arora discloses the multimedia device 140 comprises an MPEG device. A parser is a program for viewing the internal structure of MPEG-files in MPEG. Therefore, the device 140 would inherently include such a program to detect the video stream.

Regarding claim 26-28, see rejection of claim 21-22.

Considering claim 29, see rejection of claim 25.

Considering claim 31, see rejection of claim 30.

Considering claim 32, the Internet as a source of data such as text, graphics, video and audio is notoriously well known in the art. In that regard, Arora teaches the following:

[0002] Consumer interest in multimedia entertainment has expanded. Computer systems can be used to enhance a multimedia experience to a consumer. Computer systems can include communications interfaces to receive and process multimedia data from a network, such as the Internet, or compact disk (CD) or digital video disk (DVD) drives to playback video to the consumer. Computer systems can include television tuner cards to receive analog multimedia data. By playing back video within a computer system, windows used to present video within an operating system can be resized to match different aspect ratios associated with the video data. Similarly, multimedia data can be stored in the computer system for future playback in the aspect ratio the video is to be displayed. See paragraph [0002].

As to claim 33, see rejection of claim 32.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims **3, 5-7, and 34-36**, are again rejected under 35 U.S.C. 103(a) as being unpatentable over Arora, US Pub. No. 2004/0114049.

Considering claim 3, Arora discloses display device 455 and video system 400 as illustrated in Fig.4, as well as methods of modifying the received video stream and displaying it on the display 455. Arora does not specifically disclose designating a location for the window. However, the examiner takes Official Notice here in that designating a location to display a PIP or a window is notoriously well known in the art of computers or television broadcast reception and, therefore, it would have been obvious to those with ordinary skill in the art because, otherwise, the image would not be displayed properly as the user intended.

Considering claim 5, see rejection of claim 3.

Regarding claims 6 and 7, Arora does not specifically disclose synchronizing the two video streams. However, the examiner takes official notice in that it would have been obvious to those with ordinary skill in the art that the two video signals would be

synchronized to each other if they are to simultaneously be displayed as seamlessly as possible as claimed.

Considering claim 34-35, see rejection of claims 10 and 11 above.

Considering claim 36, Arora discloses receiving video stream. Such video data/stream is well known to originate from a studio, a head-end, a broadcasting station, or a transmitting tower. Therefore, the examiner takes Official Notice here in that the studio, the head-end, etc. as a source or originator of programs for broadcast such as audio/voice, video or television signals is notoriously well known in the art of broadcast and it would have been obvious to those with ordinary skill in the art that Arora would be receiving the video stream 105 from such sources.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

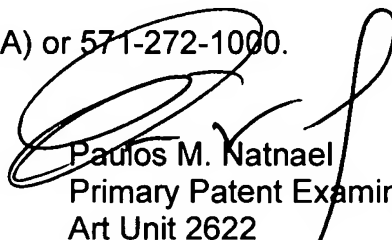
Art Unit: 2622

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paulos M. Natnael whose telephone number is (571) 272-7354. The examiner can normally be reached on 8AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571)272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Paulos M. Natnael  
Primary Patent Examiner  
Art Unit 2622

August 5, 2007